

## REMARKS

This paper is in response to the official action of June 19, 2006, wherein claims 1-9 were at issue, claims 1-9 were objected to for formal reasons, and claims 1 and 4-9 were rejected as anticipated by Jelinek et al. ("Jelinek"). Claims 2 and 3 were free of the art.

In response, claims 1 and 4 have been amended to address the informalities objected to in the action, claims 2 and 3 have been canceled, and new claims 10-24 have been added.

New claim 10 incorporates the limitations of claims 1 and 2, and claims 11-17 correspond to original claims 3-9, respectively.

New claim 18 incorporates the limitations of original claim 1 and 3, and claims 19-24 correspond to original claims 4-9, respectively.

With the foregoing amendments, claims 1 and 4-24 are at issue, for a total of 22 claims and three independent claims.

Our check in the amount of \$100 is submitted herewith to cover the filing fee for two additional claims in excess of 20.

It is submitted that claims 10-24 are free of the art, as they correspond to original claims 2 and 3. An indication to that effect is solicited.

The rejection of claim 1 and 4-9 based on the Jelinek article is respectfully but strongly traversed. Reconsideration is requested.

It is respectfully submitted that the Jelinek article in no way anticipates the present claims; in fact, the Jelinek disclosure relates to an entirely different subject matter. As disclosed in the Jelinek abstract, and elsewhere throughout the paper, the purpose of the procedure described in Jelinek is to provide an evaluation of the envelope of the frequency spectrum of a signal. On the other hand, the present

invention is concerned with the envelope of the *time* signal, as opposed to the frequency spectrum of the signal.

On page 3 of the action, the examiner refers to equation (5) of Jelinek and the limited search range  $\langle -2;2 \rangle$  of FTT samples, respectively, as a basis for the anticipation rejection of the present claims, which relates to a method for removing a spectral sideband. In Jelinek, the purpose is to find several local maxima within an always limited search region, to the left and the right of the previously estimated frequency positions. Formula (5) has nothing to do with searching for maxima, and is not concerned at all with elimination of a sideband.

Further, Jelinek does not disclose "generating inverse-transformed samples by inverse Fourier transforming the sideband-cleared, Fourier-transformed sample" as asserted by the examiner. Jelinek does not deal at all with a sideband-purified signal as in the present invention. As is described in detail in the Jelinek article, a spectrum is back-transformed, which represents an interpolated spectral envelope ("...and the autocorrelation coefficients are found through the inverse DFT of envelope power spectrum").

The examiner also states that Jelinek discloses "forming values of an absolute value of the inverse transformed samples." The relationship cited by the examiner means that the values of the samples are formed in the spectral plane, and only after the IDFT is calculated. On the other hand, in the present application, the IDFT is calculated first and then the values from the time samples are produced. If one were to calculate the value in the spectral plane itself, the phase information would be lost in the frequency area, which would be fatal for the determination of the envelopes.

The examiner further states: with regard to claim 4: "Jelinek further teaches that the method includes taking the logarithm values of the absolute value relative to

an effective value of the inverse-transformed samples". However, Figure 2 quoted by the examiner shows a spectrum, that is, amplitude vs. frequency (which shows the *spectral* envelope). Therefore, this cannot be a back-transformed signal, since a back-transformed signal is located in the time plane.

The examiner further states with regard to claim 5: "Jelinek further teaches that the method includes displaying the frequency distribution of the logarithmic values as a function of logarithmic levels." Even if a display of logarithmic levels is named as a function of the frequency (which is generally known as a spectrum), the term "frequency distribution" in the present application means how frequently a certain level occurs. A representation of a spectrum means something completely different.

For all the foregoing reasons, it is asserted that all claims 1 and 4-24 are of proper scope and form for allowance, and such action is listed.

Should the examiner wish to discuss the foregoing or any matter of form in an effort to advance this application toward allowance, he is urged to telephone the undersigned at the indicated number.

Respectfully submitted,

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